

**Table 8-1. Pipe sizing guidelines for condensate return systems.****TWO-PIPE SYSTEM SIZING GUIDELINES**

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- DETERMINE CONDENSATE LINE PRESSURE (AS OBSERVED FROM ON-SITE PRESSURE GAGES).
- DETERMINE CONDENSATE LOAD (lbm/hr) FROM CENTRAL PLANT LOGS AND OTHER INPUT.
- ASSUME CONDENSATE AT TRAP DISCHARGE IS A COMBINATION OF CONDENSATE AND FLASH STEAM.
- SIZE LINE TO ACCOMMODATE 5,000 ft/min STEAM AND CONDENSATE MIXTURE VELOCITY AND TO ENSURE MIXTURE PRESSURE IS HIGH ENOUGH TO OVERCOME LINE LOSSES.

**THREE-PIPE SYSTEM SIZING GUIDELINES**

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## GRAVITY LINE

- SLOPE AT 1 inch/20 feet (MINIMUM) TOWARD RECEIVER.
- TOTAL PRESSURE DROP LESS THAN 0.25 psi.
- LINE SIZE WILL BE TWO (2) INCHES.

## PUMPED LINE

- SIZE PUMPS TO MOVE CONDENSATE TO THE CENTRAL PLANT AT THE REQUIRED HEAD AT 200 deg. F.